

I CLAIM:

1. A connector for coaxial cables having a foil covered dielectric insulator encasing a central conductor, and either one or two layers of braided shield around the dielectric insulator beneath an outer jacket, said connector comprising:

a mandril with a bore of a diameter to closely receive the dielectric insulator of such coaxial cable, having at a first end thereof a sleeve adapted to engage the cable beneath the braided shield and the jacket;

threaded nut means rotatably and sealingly engaged to said mandril at the second end thereof, for interconnecting said connector to a mating connector or port;

a retainer fixed to said mandril, having a generally cylindrical wall concentric to said sleeve of said mandril defining an annular channel therebetween,

said channel being dimensioned to receive the braided shield and the jacket of the cable, with an annular gap between the jacket and the retainer wall;

a bushing disposed around a portion of said retainer and concentric thereto, having at its free end a mouth of a diameter to closely receive the cable,

said bushing having a deformable collar therein,

and said bushing being moveable from a first position in which said collar of said bushing is remote from said annular gap, to a second position in which said collar is wedged into said annular gap, deforming therein so as to squeeze the braided shield and the jacket of the cable and thereby tightly hold the cable and seal it to said connector.

2. The connector of claim 1, wherein said mandril has a flange at said second end which retains said nut means.

5 3. The connector of claim 2, wherein said nut means has a flange opposing said flange of said mandril.

4. The connector of claim 3, wherein said sleeve is tapered and barbed.

10 5. The connector of claim 4, wherein said bushing is engaged to said retainer by close frictional contact, and is moveable slidingly from said first position to said second position by means of a squeezing tool.

15 6. The connector of claim 5, further comprising an O-ring retained upon said mandril and proximal said second end thereof, dimensioned to form a seal between said mandril and said nut means.

20 7. The connector of claim 6, wherein said O-ring is held in a groove on said mandril, in contact with said flange of said nut means.

8. The connector of claim 7, wherein said retainer is fixed to said mandril proximal said second end thereof.

25 9. A connector for coaxial cables having a foil covered dielectric insulator encasing a central conductor, and either one or multiple layers of braided shield around the dielectric insulator beneath an outer jacket, said connector comprising:

30 an internal body having a bore of a diameter to receive the dielectric insulator of such a coaxial cable, and having a sleeve with an end adapted to engage the cable beneath the braided shield and the jacket,

35 and said internal body also having a generally cylindrical wall concentric to said sleeve defining an annular channel

therebetween dimensioned to receive the braided shield and the jacket of the cable, with an annular gap between the jacket and the wall;;

5 threaded nut means rotatably mounted to said internal body, remote from said sleeve end thereof, for interconnecting said connector to a mating connector or port;

10 an external body surrounding a portion of said internal body, having at a free end thereof a mouth of a diameter to receive the cable, said mouth being generally concentric with said bore of said internal body,

15 said external body having an inner deformable collar proximal said mouth,

20 said external body being assembled with said internal body and said rotatable nut means so as to resist subsequent disassembly,

25 and said external body being moveable without disassembly from said internal body, from a first position in which said collar is remote from said annular gap, to a second position in which said collar is partially within said annular gap,

30 such that said connector can be attached to the cable by inserting the cable into said mouth of said external body while said external body is in said first position, and pushing the dielectric insulator of the cable into the bore of the internal body with said sleeve end thereof engaging beneath the braided shield and the jacket of the cable,

35 and subsequently moving said external body to said second position, thereby wedging said collar into said annular gap, deforming therein, so as to squeeze the braided shield and the

jacket of the cable and thereby tightly hold the cable and seal it to said connector.

5 10. The connector of claim 9, wherein said internal body and said external body are generally cylindrical and concentric with each other.

11. The connector of claim 10, further comprising sealing ring means disposed around said internal body and sealingly contacting said nut means.

10 12. The connector of claim 11, wherein said mandril has a flange remote from said sleeve end which retains said nut member.

13. The connector of claim 12, wherein said sleeve end is tapered and barbed.

15 14. The connector of claim 13, wherein said bushing is assembled with said connector by close frictional contact, and is moveable slidingly from said first position to said second position by means of a squeezing tool.

20 15. The connector of claim 14, wherein said bushing slides over said sealing means when moved into said second position, thereby forming a compressive moisture proof seal between said bushing and said mandril and said nut means.

25 16. The connector of claim 1 or claim 9, wherein said deformable collar is plastic.

30 17. The connector of claim 1 or claim 9, wherein said deformable collar has an inwardly tapered edge.